CLAIMS:

1. A polynucleotide that encodes a 30P3C8 polypeptide, wherein the polynucleotide is selected from the group consisting of:

(a) a polynucleotide having the sequence as shown in FIGS. 1A-1D (SEQ ID NO: 1), wherein T can also be U;

(b) a polynucleotide having the sequence as shown in FIGS. 1A-1D (SEQ ID NO: 1), from nucleotide residue number 165 through nucleotide residue number 1367, wherein T can also be U;

(c) a polynucleotide encoding a 30P3C8 polypeptide whose sequence is encoded by the cDNAs contained in the plasmid designated p30P3C8-GTA4 deposited with American Type Culture Collection as Designation No. 207083;

(d) a polynucleotide encoding a 30P3C8 protein having the amino acid sequence shown in FIGS. 1A-1D (SEQ ID NO: 2); and

(e) a polynucleotide that is fully complementary to a polynucleotide of any one of (a)-(d).

2. A polynucleotide that encodes a polypeptide that is at least 90% identical to the amino acid sequence shown in FIGS. 1A-1D (SEQ ID NO: 2) over its entire length.

3. A fragment of a polynucleotide of claim 1 comprising:

(a) a polynucleotide having the sequence as shown in FIGS. 1A-1D (SEQ ID NO: 1), selected from the group consisting of the sequence from

nucleotide residue number 3 through nucleotide residue number 161, the sequence from nucleotide residue number 165 through nucleotide residue number 251 and the sequence from nucleotide residue number 164 through nucleotide residue number 251;

(b) a polynucleotide that is a fragment of the polynucleotide of (a) that is at least 20 nucleotide bases in length; or

(c) a polynucleotide that selectively hybridizes under stringent conditions to the polynucleotide of (a) or (b).

4. A polynucleotide that encodes a 30P3C8 polypeptide, wherein the polypeptide includes an amino acid sequence selected from the group consisting of NITT (SEQ ID NO: 3), NQTN (SEQ ID NO: 4), NHTL (SEQ ID NO: 5), RKFS (SEQ ID NO: 6), KRDT (SEQ ID NO: 7), SMK, SSR, TKK, SKR, TDK, TTGE (SEQ ID NO: 8), TNLE (SEQ ID NO: 9), SETD (SEQ ID NO: 10), KLRGEDDY (SEQ ID NO: 11), GLGNGR (SEQ ID NO: 12), GLPHTE (SEQ ID NO: 13), GNVLGN (SEQ ID NO: 14), GNSKSQ (SEQ ID NO: 15), GNDRNI (SEQ ID NO: 16), and NGRR (SEQ ID NO: 17).

5. A polynucleotide of any one of claims 1-4 that is labeled with a detectable marker.

6. A recombinant expression vector that contains a polynucleotide of any one of claims 1-4.

7. A host cell that contains an expression vector of claim 6.

8. A process for producing a 30P3C8 polypeptide comprising culturing a host cell of claim 7 under conditions sufficient for the production of the polypeptide.

9. The process of claim 8, further comprising recovering the 30P3C8 polypeptide so produced.

10. A 30P3C8 polypeptide produced by the process of claim 8.

11. A 30P3C8 polypeptide encoded by the polynucleotide of any one of claims 1-4.

12. A polypeptide comprising at least 15 contiguous amino acids of the polypeptide of claim 11.

13. An antibody or fragment thereof that specifically binds to the 30P3C8 polypeptide of claim 10.

14. The antibody or fragment thereof of claim 13, which is monoclonal.

15. The antibody or fragment thereof of claim 13, which is polyclonal.

16. A recombinant protein comprising the antigen binding region of a monoclonal antibody of claim 14.

17. The antibody or fragment thereof of claim 13, which is labeled with a detectable marker.

18. The antibody or fragment thereof of claim 17, wherein the detectable marker is selected from the group consisting of a radioisotope, fluorescent compound, bioluminescent compound, chemiluminescent compound, metal chelator or enzyme.

19. The antibody fragment of claim 13, which is an Fab, F(ab')2, Fv or Sfv fragment.

20. The antibody of claim 13, which is a human antibody.

21. The antibody of claim 13, which comprises murine antigen binding region residues and human antibody residues.

22. A transgenic animal producing a monoclonal antibody of claim 20.

23. A hybridoma producing a monoclonal antibody of claim 14.

24. A single chain monoclonal antibody that comprises the variable domains of the heavy and light chains of a monoclonal antibody of claim 14.

25. A vector comprising a polynucleotide encoding a single chain monoclonal antibody of claim 24.

26. An assay for detecting the presence of a 30P3C8 protein in a biological sample comprising contacting the sample with an antibody or fragment thereof of claim 17, and detecting the binding of 30P3C8 protein in the sample thereto.

27. An assay for detecting the presence of a 30P3C8 polynucleotide in a biological sample, comprising

(a) contacting the sample with a polynucleotide probe that specifically hybridizes to the polynucleotide of claim 1; and

(b) detecting the presence of a hybridization complex formed by the hybridization of the probe with 30P3C8 polynucleotide in the sample, wherein the presence of the hybridization complex indicates the presence of 30P3C8 polynucleotide within the sample.

28. An assay for detecting the presence of 30P3C8 mRNA in a biological sample comprising:

(a) producing cDNA from the sample by reverse transcription using at least one primer;

(b) amplifying the cDNA so produced using 30P3C8 polynucleotides as sense and antisense primers to amplify 30P3C8 cDNAs therein;

(c) detecting the presence of the amplified 30P3C8 cDNA,

wherein the 30P3C8 polynucleotides used as the sense and antisense probes are capable of amplifying the 30P3C8 cDNA contained within the plasmid as deposited with American Type Culture Collection as Designation No. 207083.

29. A method of detecting the presence of a cancer expressing 30P3C8 protein that comprises determining the level of 30P3C8 protein expressed by cells in a test tissue sample from an individual and comparing the level so determined to the level of 30P3C8 expressed in a corresponding normal sample, the presence of elevated 30P3C8 protein in the test sample relative to the normal sample providing an indication of the presence of such cancer in the individual.

30. A method of monitoring 30P3C8 gene products comprising determining the status of 30P3C8 gene products expressed by cells in a test tissue sample from an individual and comparing the status so determined to the status of 30P3C8 gene products in a corresponding normal sample, the presence of aberrant 30P3C8 gene products in the test sample relative to the normal sample providing an indication of disregulated cell growth within the individual.

31. A method of diagnosing the presence of cancer in an individual comprising:

(a) determining the level of 30P3C8 mRNA expressed in a test sample obtained from the individual; and

(b) comparing the level so determined to the level of 30P3C8 mRNA expressed in a comparable known normal tissue sample,

the presence of elevated 30P3C8 mRNA expression in the test sample relative to the normal tissue sample providing an indication of the presence of cancer.

32. A method of diagnosing the presence of cancer in an individual comprising:

(a) determining the level of 30P3C8 protein expressed in a test sample obtained from the individual; and

(b) comparing the level so determined to the level of 30P3C8 protein expressed in a comparable known normal tissue sample,

the presence of elevated 30P3C8 protein in the test sample relative to the normal tissue sample providing an indication of the presence of cancer.

33. The method of claim 31 or 32, wherein the cancer is prostate cancer, and the test and normal tissue samples are selected from the group consisting of prostate tissue, bone tissue, lymphatic tissue, serum, blood or semen.

34. The method of claim 31 or 32, wherein the cancer is selected from the group consisting of cancer of the bladder, pancreas, colon, brain, bone, lung, kidney and prostate, and the test and normal tissue samples are selected from the group consisting of serum, blood or urine and tissues of the bladder, pancreas, colon, brain, bone, lung, kidney and prostate.

35. A pharmaceutical composition comprising a 30P3C8 polypeptide of claim 10 or an immunogenic portion thereof, the vector of claim 25, an antisense polynucleotide complementary to a polynucleotide of claim 1, or a ribozyme

capable of cleaving a polynucleotide of claim 1, and, a physiologically acceptable carrier.

36. A pharmaceutical composition comprising a 30P3C8 polypeptide of claim 11 or an immunogenic portion thereof, and, a physiologically acceptable carrier.

37. A method of treating a patient with a cancer that expresses 30P3C8 which comprises administering to said patient a vector according to claim 25, such that the vector delivers the single chain monoclonal antibody coding sequence to the cancer cells and the encoded single chain antibody is expressed intracellularly therein.

38. A vaccine composition for the treatment of a cancer expressing 30P3C8 comprising an immunogenic portion of a 30P3C8 polypeptide and a physiologically acceptable carrier.

39. A method of inhibiting the development of a cancer expressing 30P3C8 in a patient, comprising administering to the patient an effective amount of the vaccine composition of claim 38.